

[0012] The invention can be implemented in numerous ways, including as a method, system, device, apparatus, graphical user interface, or computer readable medium. Several embodiments of the invention are discussed below.

[0013] As a method for scrolling through portions of a data set, one embodiment of the invention includes at least the acts of: receiving a number of units associated with a rotational user input; determining an acceleration factor pertaining to the rotational user input; modifying the number of units by the acceleration factor; determining a next portion of the data set based on the modified number of units; and presenting the next portion of the data set.

[0014] As a method for scrolling through portions of a data set associated with a handheld electronics device, one embodiment of the invention includes at least the acts of: receiving a rotational user input; determining an acceleration value pertaining to the rotational user input; and scrolling to a next portion of the data set based on at least the acceleration value. The acceleration value specifies a degree of acceleration associated with the rate at which the scrolling through the portions of the data set is to be achieved.

[0015] As a method for scrolling through portions of a data set associated with a handheld electronics device, another embodiment of the invention includes at least the acts of: receiving a rotational user input; determining whether or not to provide acceleration with respect to the rotational user input; and scrolling to a next portion of the data set in either an accelerated manner when the determining determines that acceleration is to be provided, or in an unaccelerated manner when the determining determines that acceleration is not to be provided.

[0016] As a method for scrolling through portions of a file, one embodiment of the invention includes at least the acts of: receiving a number of units from a rotational input device; determining a speed of rotation for the rotational input device; applying acceleration when the speed of rotation is greater than a speed threshold; removing any acceleration being applied when the speed of rotation is less than the speed threshold; modifying the number of units in accordance with the acceleration, if any; determining a next portion of the file based on the modified number of units; and presenting the next portion of the file.

[0017] As a portable media player, one embodiment of the invention includes at least: a storage disk drive that stores media content for each of a plurality of media items; a display screen that displays a portion of the media items at a time; a user input device that enables a user of the portable media player to at least scroll through the plurality of media items using a rotational action with respect to the user input device; and a processor that determines a rate of scrolling and thus determines a next portion of the media items to be displayed.

[0018] As a method for displaying a portion of a list of media items on a display of a media player, the media player having a rotational input device, one embodiment of the invention includes at least the acts of: determining a rate of turn of the rotational input device; obtaining a length of the list of media items; determining a next portion of the list of media items to be displayed based on the rate of the turn of the rotational input device and the length of the list of media items; and displaying the next portion of the list of media items.

[0019] As a method for displaying a portion of a list of items on a display of a computing device, the computing device having a rotational input device, one embodiment of the invention includes at least the acts of: determining an indication of turning of the rotational input device; determining a next portion of the list of items to be displayed based on the indication of turning of the rotational input device; and displaying the next portion of the list of items.

[0020] As a consumer electronics product, one embodiment of the invention includes at least: a storage disk that stores a plurality of media items; a display for displaying a first portion of the plurality of media items; and a user input device that enables a user of the consumer electronics product to at least scroll through a list of the plurality of media items in accordance with a user-controlled scroll rate; and a processor. The processor determines an acceleration factor for use in scrolling through the list of the plurality of media items and causes the consumer electronics product to display a second portion of the plurality of media items. The location of second portion of the plurality of media items within the list of the plurality of media items is dependent on at least the user-controlled scroll rate and the acceleration factor.

[0021] Other aspects and advantages of the invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, illustrating by way of example the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] The present invention is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings and in which like reference numerals refer to similar elements and in which:

[0023] **FIG. 1** is a flow diagram of scroll processing according to one embodiment of the invention.

[0024] **FIG. 2** is a flow diagram of list navigation processing according to another embodiment of the invention.

[0025] **FIG. 3** is a flow diagram of acceleration amount processing according to one embodiment of the invention.

[0026] **FIG. 4** is a flow diagram of acceleration amount processing according to another embodiment of the invention.

[0027] **FIG. 5** is a representative acceleration state machine according to one embodiment of the invention.

[0028] **FIG. 6** is a flow diagram of next portion determination processing according to one embodiment of the invention.

[0029] **FIG. 7A** is a perspective diagram of a computer system in accordance with one embodiment of the invention.

[0030] **FIG. 7B** is a perspective diagram of a media player in accordance with one embodiment of the present invention.

[0031] **FIG. 8A** is a block diagram of a media player according to one embodiment of the invention.

[0032] **FIG. 8B** is a block diagram of a computing system according to one embodiment of the invention.